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ABSTRACT

A comparison of the components of the Gregg Diamond Jubilee shorthand and Century 21 shorthand systems was studied based on the 2,500 most frequently used words in business and communications. Comparisons were analyzed for the following areas: (1) number of class sessions necessary to teach the theory portion of the system, (2) number of words which are written with special abbreviation, and (3) difference in writing the symbols based on the average number of strokes per word. Another aspect of the comparison is based on a random analysis of practice materials. The discussion is supported by six tables which tabulate comparative data. (Author/EC)

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A Comparison of Gregg Diamond Jubilee and Century 21 Shorthand

by

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The purpose of this study was to compare the components of Gregg Diamond Jubilee shorthand with those of Century 21 shorthand using the 2500 most frequently used words in business communications as established by Mellinger.[1] Further analysis was made of three randomly selected passages of dictation material taken from the beginning Gregg Diamond Jubilee and the beginning Century 21 high school textbooks. All comparisons were made utilizing the computer shorthand systems and data base at Indiana State University.

COMPARISON OF SYSTEMS

Word Characteristics

Since 2500 words account for over 90 percent of all words used in business office communications, tnese words were selected as the basis for analysis.[2] Selected characteristics will also be reported for the 1500 most frequently used words.

The words contained in the data base consist mainly of one and two syllable words as indicated in Table 1. The syllabic intensity (average number of syllables per word) of the 2500 words is 2.218. This figure is considerably higher than what is considered standard syllabic intensity.

Order of Presentation of Theory

The two shorthand systems differ in the number of class sessions necessary to teach the theory portion of the system. Gregg Diamond Jubilee shorthand is presented in the first 47 lessons of the

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[1]Morris Mellinger, BASIC VOCABULARY FOR WRITTEN BUSINESS OFFICE COMMUNICATIONS, Chicago: Chicago State College Publication Series, 1970.

[2]The first 2500 words on the Mellinger list contain 2499 different words since the word 'club' is listed twice. Subsequently, the Mellinger list will be referred to as the 1500 word list or the 2500 word list although the actual count of words will be 1499 or 2499.

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beginning textbook with every sixth lesson devoted to review. This pattern is the same for both the high school and the collegiate series. The order of presentation of theory in the Century 21 collegiate series and the Century 21 high school series is different. According to the promotion material on Century 21,[3] for the collegiate series theory presentation is completed with Lesson 33 while Lessons 4, 8, 12, 16, 20, and 28 contain no new theory. In Century 21 high school, the presentation of theory is completed with Lesson 29 in which Lessons 5, 10, 15, 20, 25, and 28 contain no new theory. Thus, Gregg Diamond Jubilee shorthand takes 40 lessons in which to learn all the theory while in Century 21 shorthand it takes 27 lessons in the collegiate series and 23 lessons in the high school series to complete theory.

An analysis of when the 2500 most frequently used words could first be written in the three beginning textbooks indicates that part of the difference in the length of time necessary to learn 'theory' can be attributed to each authors particular classification system. The Diamond Jubilee system presents all aspects of shorthand theory in the first 47 lessons while in the Century 21 systems some speed forms and contracted words are first presented in lessons beyond the formal completion of theory. Of the 2500 Mellinger words, 80 words cannot be written upon the completion of theory (Lesson 29) in the Century 21 high school series and 12 words cannot be written upon the completion of the theory lessons (Lesson 33) in Century 21 collegiate series.

Table 2 is a cumulative frequency distribution of the lesson introduction codes (when the 2500 words can first be written in each of the three beginning shorthand textbooks).

Word Types

Both shorthand systems contain a number of words which are written with special abbreviations. In the Gregg Diamond Jubilee system these words are called brief forms while in the Century 21 system they are referred to as speed forms.

The Gregg Diamond Jubilee system contains 129 brief form outlines representing 148 different words. Of the 148 brief form words, 126 are within the first 1500 words on the Mellinger list. Twenty-two of the brief forms, or 14.9 percent, are not within the first 1500 words. When the word base is increased to 2500 words, 137 different words are classified as brief forms. Eleven words,[4] or 7.4 percent are not among the 2500 most frequently used words.

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[3]"Century 21 Shorthand," Promotional material distributed September, 1974, announcing the Century 21 shorthand system.

[4]The brief forms not on the 2500 list are: advertise, character, correspond, govern, merchant, object, ordinary, organize, probable, satisfy, won.

The Century 21 system contains 175 speed form symbols which represent 214 different words. Of the 214 words, 174 are within the first 1500 on the Mellinger list. Forty words, or 18.7 percent, are beyond the 1500 most frequently used words. An additional 15 speed form words are added to the total when the word base is increased to 2500 words. Thus, twenty-five words[5] or 11.7 percent of the speed form words are not among the 2500 most frequently used words.

Almost twice as many words are classified as speed-form derivatives in the Century 21 system as those classified as brief-form derivatives in the Gregg Diamond Jubilee system. Century 21 has 225 speed-form derivatives within the first 1500 words; 351 within the 2500 most used words. The Diamond Jubilee system has 120 brief-form derivatives within the first 1500 words and 182 within the first 2500 words.

Both shorthand systems contain special word beginnings and word endings. Of the 2500 words, 246 words contain at least one word beginning in the Gregg Diamond Jubilee system while 207 of the words contain at least one word beginning when written in Century 21 shorthand. Although the Gregg Diamond Jubilee system contains more words with word beginnings than does the Century 21 system, the situation is reversed when the words are classified by word endings. The Gregg Diamond Jubilee system contains 328 words with at least one word ending while the Century 21 system contains 427 words with at least one word ending. The major reason for the large increase in word endings in the Century 21 system is that all past tenses are classified as word endings. Since 220 of the 2500 words contain past tenses, this accounts for almost all of the differences in the number of word endings between the two systems. Table 3 summarizes the word types in the two shorthand systems for both the 1500 and 2500 vocabulary level.

Number of Strokes

An indication of the difference in writing the symbols between the two shorthand systems is the average number of strokes per word. Each of the words in the 2500 most frequently used words were coded as to the number of strokes required to write the symbols in Gregg and in Century 21 shorthand. The average number of strokes per outline for the 2500 words written in Gregg Diamond Jubilee shorthand was 4.379 with a standard deviation of 1.507. The mean number of strokes per outline for the words written in Century 21 shorthand was 4.200 with a standard deviation of 1.435. When a test of significance for the difference between the two sample means was calculated, the difference was significant at the .00001 level (calculated $z = 4.296$). Thus, when outlines are written in

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[5]The speed forms not on the 2500 list are: accord, administer, advertise, associate, certify, construct, correspond, count, custom, deliver, distinct, distinguish, economy, educate, employ, equip, govern, inspect, instruct, organize, probable, satisfy, situate, specify, won

Century 21 shorthand significantly fewer outlines are necessary than when the outlines are written in Diamond Jubilee shorthand.

Table 4 shows the distribution of the number of strokes per word for the 2500 words.

ANALYSIS OF TEXTBOOK MATERIAL

A second component of this research was to analyze all of the practice materials in randomly selected theory lessons in the Gregg Diamond Jubilee high school textbook, 2nd edition, and in the Century 21 high school textbook. Using a table of random numbers, three theory lessons were selected from each of the textbooks. The lessons selected were:

Diamond Jubilee:	Lessons 5, 10, 22
Century 21:	Lessons 3, 8, 18

All words illustrating the theory as well as the reading and writing practice were included in the analysis.

Table 5 contains a summary of some of the characteristics of the Diamond Jubilee practice material while Table 6 summarizes the same characteristics in the Century 21 practice material.

SUMMARY

This paper presents some of the differences and similarities between the structure of Gregg Diamond Jubilee shorthand and Century 21 shorthand. All comparisons were made using the 2500 most frequently used words in business office communications as established by Mellinger. The data contained in this paper is of a limited nature since it is only the preliminary step of on-going research comparing Gregg Diamond Jubilee and Century 21 shorthand. It is possible that when the word base is expanded and all of the textbook material in the two systems is analyzed, other differences will become apparent.

TABLE 1

SYLLABLES PER WORD

Number of Syllables	Frequency	Percent
6	7	.28
5	68	2.72
4	224	8.96
3	573	22.93
2	920	36.81
1	707	28.30
	2499	100.00

TABLE 2

LESSON INTRODUCTION CODES

Lesson	Diamond Jubilee		C21 High School		C21 Collegiate	
	f	%	f	%	f	%
5 or less	815	32.6	479	19.2	629	25.2
10 or less	1125	45.0	1448	57.9	1359	54.4
15 or less	1426	57.1	1878	75.2	1819	72.8
20 or less	1709	68.4	2171	86.9	2101	84.1
25 or less	1903	76.2	2331	93.3	2357	94.3
30 or less	2178	87.2	2419	96.8	2453	98.2
35 or less	2353	94.2	2499	100.0	2489	99.6
40 or less	2439	97.6			2491	99.7
45 or less	2487	99.5			2499	100.0
47 or less	2499					

TABLE 3

WORD TYPES

Word Type	Brief/Speed Forms		Derivatives		Word Beginnings		Word Endings	
Vocab. Level	1500	2500	1500	2500	1500	2500	1500	2500
Gregg	126 (8.4)	137 (5.5)	120 (8.0)	182 (7.3)	246 (16.4)	457 (18.3)	328 (21.9)	605 (24.2)
Century 21	174 (11.7)	189 (7.7)	225 (15.0)	352 (14.1)	207 (13.8)	391 (15.6)	427 (28.5)	814 (32.6)

(The figures in the parentheses are percents of total number of words.)

TABLE 4

SHORTHAND STROKES PER WORD

Number of Strokes	Frequency		Percent	
	DJ	C21	DJ	C21
10	2	1	.08	.04
9	13	6	.52	.24
8	45	33	1.80	1.32
7	160	111	6.40	4.44
6	340	285	13.61	11.41
5	521	556	20.85	22.25
4	689	688	27.57	27.53
3	507	559	20.29	22.37
2	182	212	7.28	8.48
1	40	48	1.60	1.92
	2499	2499	100.00	

Table 5

DIAMOND JUBILEE PRACTICE MATERIALS

Characteristic	Lesson		
	5	10	22
Number of Words	374	445	539
Number of Different Words	195	213	246
Percent of Different Words	52.1	47.9	45.6
Number of Words Beyond 2500 Combined	58	50	43
Percent of Words Beyond 2500 Combined	15.5	11.2	8.0
Syllabic Intensity	1.711	1.368	1.609

Table 6

CENTURY 21 PRACTICE MATERIALS

Characteristic	Lesson		
	3	8	18
Number of Words	491	551	587
Number of Different Words	84	234	272
Percent of Different Words	17.1	42.5	46.3
Number of Words Beyond 2500 Combined	32	9	32
Percent of Words Beyond 2500 Combined	6.5	1.6	5.4
Syllabic Intensity	1.047	1.296	1.654